# Frequently Asked Questions In-Use Off-Road Diesel Vehicle Regulation

Excess Particulate Matter (PM) Verified Diesel Emission Control Strategies (VDECS) Credits Used for Compliance with the Off-Road and Truck and Bus Regulations (Excess PM VDECS Credit Provisions) FAQ January 2013

### Q - What do the excess PM VDECS credit provisions do?

A - The excess PM VDECS credit provisions allow fleets subject to both the In-Use Off-Road Diesel Vehicle Regulation (Off-Road regulation, title 13, CCR, section 2449), and the Truck and Bus regulation (title 13, CCR, section 2025) to generate excess credits by early compliance or annual over compliance with one regulation. The excess credits generated from one regulation can be used to reduce compliance responsibilities under the other regulation. These credits can only be generated by VDECS installations, and can be transferred between the two regulations each year until they expire or January 1, 2017, whichever occurs first.

#### Q - What are excess PM VDECS credits?

- A Excess PM VDECS credits are credits earned through the Off-Road or Truck and Bus regulations by installing Level 3 PM VDECS:
  - 1. Before compliance actions are required, or
  - 2. Beyond annual compliance requirements.

# Q - How can these credits be used towards the Off-Road or Truck and Bus regulations?

A - If a fleet has vehicles that are subject to both the Truck and Bus and Off-Road regulations, it may use excess PM VDECS credits generated through compliance with one regulation towards compliance with the other regulation.

For example, if excess PM VDECS credits are generated from compliance with the Off-Road regulation, those credits may be used towards compliance with the Truck and Bus regulation. Similarly, excess PM VDECS credits generated from compliance with the Truck and Bus regulation may be used towards compliance with the Off-Road regulation.

Q - How do I earn excess PM VDECS Credits through the Off-Road regulation that can be used towards compliance under the Truck and Bus regulation?

A - Excess PM VDECS credits can be earned each year through the Off-Road regulation by installing Level 3 PM VDECS beyond what is required by the Off-Road regulation.

Before compliance is required: If an off-road fleet installs a Level 3 PM VDECS before the start of their first compliance year (i.e., before January 1, 2013, for large fleets, before January 1, 2016, for medium fleets, and before January 1, 2018, for small fleets), the off-road fleet may choose to earn single excess PM VDECS credit for use in the Truck and Bus regulation (and to forego the potential double credit available under the Off-road regulation).

<u>During a compliance year:</u> If an off-road fleet fulfills the BACT requirements for a given compliance year (i.e., meets the BACT rate in section 2449.1(b)(1)), and then installs one or more Level 3 PM VDECS beyond that which is required in that same year, the fleet shall earn a BACT credit each additional VDECS installed, which it can choose to apply to the Truck and Bus regulation (rather than the Off-road regulation).

Excess PM VDECS credits are applied to the Truck and Bus regulation (per section 2025) as follows:

Excess PM VDECS credits to apply towards the Truck and Bus regulation = [(Total max horsepower (hp) of excess engines with the Level 3 PM VDECS installed) divided by 300] truncated to a whole number<sup>1</sup>

For each excess PM VDECS credit earned under the Off-Road regulation, the fleet may use that credit on a one-to-one basis towards compliance under the Truck and Bus regulation's PM BACT requirements in section 2025(i) for one vehicle with a gross vehicle weight rating (GVWR) greater than 26,000 pounds (lbs).

## Example 1: Before compliance is required (i.e., early VDECS installations)

If a large off-road fleet installs Level 3 PM VDECS before January 1, 2013 (i.e., at least one year before the fleet's first Off-Road regulation compliance deadline), the fleet could accrue credit that could be used towards compliance with the Truck and Bus regulation as follows:

<sup>&</sup>lt;sup>1</sup> If truncation does not result in a whole number, any remaining hp with Level 3 PM VDECS not used to generate excess PM VDECS credit (i.e., the truncated amount) may be used as carryover BACT credit towards compliance with the Off-Road regulation, or may be accumulated to generate excess PM VDECS credits in future years (see examples provided).

- 1. The fleet takes early action and installs Level 3 PM VDECS on 300 hp. Under this scenario, the fleet could elect to accrue one excess PM VDECS credit, which may be used towards compliance with the Truck and Bus regulation. If the fleet uses the credit towards compliance with the Truck and Bus regulation, it would not be able to receive double credit for early BACT compliance that could be used to comply with the Off-Road regulation.
- 2. The fleet takes early action and installs Level 3 PM VDECS on 400 hp. Under this scenario, if the fleet elects to use the credit as excess PM VDECS credit, it would still only accrue one excess PM VDECS credit, which could be used to towards compliance with the Truck and Bus regulation, since [(400/300) truncated to a whole number] = 1. The remaining 100 hp could either be carried forward and used to accumulate excess PM VDECS credit in future years or used as a carryover credit to comply with the Off-Road regulation, in which case the carryover BACT credit would be 200 hp (double credit for early VDECS installations used for compliance with the Off-Road Regulation

# Example 2: During a compliance year

If a large off-road fleet under section 2449.1(b)(1) turns over or installs PM VDECS on 1,000 horsepower (hp) between January 1, 2013, and December 31, 2013 to meet its compliance targets, the fleet could accrue excess PM VDECS credit that could be used towards compliance with the Truck and Bus regulation PM BACT requirements as follows:

- 1. The off-road fleet turns over 1,000 hp, and installs Level 3 PM VDECS on 300 hp. Under this scenario, the fleet could choose to accrue one excess PM VDECS credit, which may be used towards compliance with the Truck and Bus regulation (i.e., an additional truck complying with the Truck and Bus phase-in option would be treated as compliant). If the fleet uses the credit towards compliance with the Truck and Bus regulation, it would not receive any BACT carryover credit under the Off-Road regulation.
- 2. The fleet turns over 1,000 hp, and installs Level 3 PM VDECS on 400 hp. Under this scenario, the fleet would still only accrue one excess PM VDECS credit, which may be used towards compliance with the Truck and Bus regulation, since [(400/300) truncated to a whole number] = 1. The remaining 100 hp (only 300 hp of the 400 hp was used towards compliance with the Truck and Bus regulation) could either be carried forward and used to accumulate excess PM VDECS credit in future years or used as a carryover credit to comply with the Off-Road regulation.
- Q How do I earn excess PM VDECS Credits through the Truck and Bus regulation that can be used towards compliance under the Off-Road regulation?

A - Excess PM VDECS credits can be earned each year through the Truck and Bus regulation by installing Level 3 PM VDECS beyond what is required under the phase-in option of section 2025(i) of the Truck and Bus regulation.

<u>During a compliance year:</u> If an on-road fleet fulfills the annual PM BACT phase-in requirements of section 2025(i), without utilizing the credits specified in sections 2025(j)(2)(A), 2025(j)(2)(B), and 2025(j)(3), and complies with the reporting requirements of section 2025(r)(27), it may receive an excess PM VDECS credit for each additional Level 3 PM VDECS installed on vehicles in the fleet in that same year. Each PM VDECS credit generated under the Truck and Bus regulation may be used towards compliance with the Off-Road regulation, as follows:

Excess PM VDECS credit to apply towards the Off-Road regulation (i.e., BACT credit, in hp, to apply towards the Off-Road regulation) = (Excess PM VDECS credits from the Truck and Bus regulation) multiplied by 300.

For each additional vehicle that generates a new excess PM VDECS credit, another one-time excess PM VDECS credit (i.e., another 300 hp of BACT credit) can be applied towards the Off-Road regulation.

# Example: During a compliance year

An on-road fleet of 10 trucks is required under section 2025(i) to have 9 Level 3 PM VDECS installed by January 1, 2014. If the fleet installs 10 Level 3 PM VDECS before January 1, 2014 (i.e., one additional Level 3 PM VDECS), then the fleet would earn a single excess PM VDECS credit, which equates to a 300 hp BACT credit that may be used towards compliance with the Off-Road regulation in 2014. If in the next year, the same retrofit is still surplus in the Truck and Bus regulation, no additional BACT credit is awarded toward the Off-Road regulation.

# Q - How long can I use excess PM VDECS credits?

### A - <u>Credits earned through the Off-Road regulation</u>

Excess PM VDECS credits earned through the Off-Road regulation may be applied towards the Truck and Bus regulation until January 1, 2017, or until the vehicle that generated the excess PM VDECS credit is 1) needed for compliance with sections 2449.1(a) or (b), or 2) is retired, sold, scrapped or otherwise removed from the California fleet. A vehicle (that generated the excess VDECS credit) is considered "needed for compliance" with the Off-Road regulation when the fleet cannot meet the next applicable fleet target without including the vehicle in the fleet average calculations, or cannot meet the next applicable BACT requirements without turning over the vehicle. When the vehicle (that generated

the excess VDECS credit) is either "needed for compliance," or it is past January 1, 2017, the VDECS on that vehicle may now be included in the fleet average calculations of the Off-Road regulation, but no BACT credit for that VDECS can be claimed.

For example, if a fleet earns an excess PM VDECS credit in 2013 by retrofitting an additional off-road vehicle (i.e., beyond what is required by the BACT requirements of the Off-Road regulation), the fleet can use that credit towards the Truck and Bus regulation's phase-in option to bring an additional vehicle having a GVWR greater than 26,000 lbs into compliance for the January 1, 2014, compliance date. However, if the off-road vehicle (that generated the excess PM VDECS credit) is then sold 2014, the excess PM VDECS credit being used towards compliance with the Truck and Bus regulation will immediately expire, and the fleet may need to take additional actions to bring the on-road fleet into compliance by the next compliance date (January 1, 2015).

## Credits earned through the Truck and Bus regulation

Excess PM VDECS credits earned through the Truck and Bus regulation may be applied towards the Off-Road regulation until January 1, 2017, or, until it is determined under the Truck and Bus regulation that a vehicle can no longer generate excess PM VDECS credits. Once this is determined, the BACT credit earned through this provision, if not previously used, will expire and can no longer be used by the fleet towards compliance with the Off-Road regulation.

For example, if by January 1, 2015, an on-road fleet is required under section 2025(i) to have 9 of its 10 vehicles equipped with Level 3 PM VDECS, but instead elects to voluntarily install Level 3 VDECS on all 10 vehicles in its fleet, the fleet would generate one excess PM VDECS credit that could be used towards compliance with the Off-Road regulation. However, if by January 1, 2016, 100 percent of the on-road fleet (i.e., all 10 vehicles) is required to have Level 3 PM VDECS installed, the fleet would not generate an excess PM VDECS credit in 2016 and any unused excess PM VDECS credit transferred to the Off-Road regulation would expire on January 1, 2016. Therefore, if the off-road fleet has not yet used the 300 hp BACT credit (i.e., the excess PM VDECS credit), it will be removed from its BACT carryover credit totals at that time.

#### Q - Can I trade excess PM VDECS credits with another fleet owner?

A - No. These provisions were designed for a single fleet owner who owns both onroad and off-road vehicles (i.e., is subject to both the Truck and Bus and Off-Road regulations); credits cannot be traded between companies/fleets that do not have the same owner.

#### Q - What do I do if I want to use excess PM VDECS credits?

A - If you wish to calculate and use excess PM VDECS credits earned through the Off-Road regulation (i.e., use additional Level 3 PM VDECS installed on off-road vehicles for compliance towards the Truck and Bus regulation), please contact the Diesel Off-road Online Reporting System hotline by phone at (877) 59DOORS (877-593-6677) or by email at <a href="mailto:doors@arb.ca.gov">doors@arb.ca.gov</a>.

If you wish to calculate and use excess PM VDECS credits earned through the Truck and Bus regulation (i.e., use additional Level 3 PM VDECS installed on onroad vehicles for compliance towards the Off-Road regulation), please contact the Diesel hotline by phone at (866) 6DIESEL (866-634-3735) or by email at 8666diesel@arb.ca.gov.